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# Measuring the impact of money supply on inflation rates in Iraq's Economy after 2003

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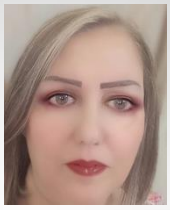

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## Abstract

Inflation is sometimes referred to as (a increase in the rate of prices, implying a loss in the value of the monetary unit) or (a rise in the rate of prices, implying a decrease in the value of the monetary unit) or (a rise in the rate of prices, implying (it is a continuous rise in prices and not just high prices). According to Keynes (correct inflation is the situation in which no additional increase in total demand leads to an additional increase in production).. Regardless of the various definitions, forms, and causes of inflation, inflation remains primarily a monetary phenomenon. Controlling it, on the other hand, necessitates regulating the money supply to ensure that it rises at a rate that is compatible with demand and at stable prices. The amount of money in the Iraqi market is remarkable, and large amounts of it are no longer sufficient to buy a basic commodity or service, to the point where following up on the rise in the prices of goods, merchandise, and services in Iraq to estimate their rates has become a difficult process due to the continuous rise in their prices.

**Keywords:** Money supply; Inflation rates; Exchange rate; Monetary policies

## Introduction

Modern policies seek to achieve significant broad-based development, but reality imposes imbalances that affect all spheres of working life (research). Inflation is one of the most important of these imbalances in the world's countries, especially today. Despite the focus and interest of economists, especially after the Second World War. Research on inflation as one of the most important economic phenomena has been and continues to be inkling in the literature on economics and money at the local and global levels. Perhaps the pleasure of research on a topic comes from the novelty and importance of inflation in that it affects the economy and its development and, on the other hand, is an indispensable means of development that has been advanced or developing as an important factor for the development.

In recent decades, Iraq has undergone significant political developments that have had an impact on various aspects of life, including the economic aspect. Iraq's economy has fluctuated in many economic variables depending on political realities and circumstances. Despite all these developments and variations in economic policy trends and in the use of their tools, the common denominator over the past years has been inflation. Iraq's overall price level has risen throughout the 1990s and 2000s and has been one of the kind of creeping inflation that has been sustained over the course of this period. The evolution of money supply has been a factor; Mainly in the occurrence and development of this problem in various economies, including the Iraqi economy.

## Research problem:

The Iraqi economy suffers from high prices of goods and services, adversely affecting the economic and social life of the consumer, both money supply and imported inflation on the Iraqi economy.

## Research Hypothesis

The most important hypothesis of this study is that Iraq's economy suffers from inflation due to monetary factors.

First hypothesis, no moral impact of money supply on inflation in the Iraqi economy

The alternative hypothesis, the moral effect of money supply on inflation in the Iraqi economy..

## Search objective

The main objective is to create the relationship between inflation on the one hand and the most important factors influencing it and the important money supply.

## Research importance

It seems important to research by recognizing the impact of money supply on inflation, through discretionary standard relationships to reach clear digital mathematical results through which solutions and recommendations are presented to monetary policymakers to reduce the negative effects of inflation on the Iraqi economy.

## Research Methodology

The research adopted the methodology of descriptive and metric analysis based on statistical tools in the analysis of the relationship between money supply as the (independent variable) and inflation as the (dependent variable), for the period from 2003-2017 to study measuring the impact of increased money supply on raising inflation boundaries in Iraq's economy..

## 1st. The concept of inflation

It is agreed between finance experts in particular and economists in general that the word inflation does not have a single meaning or a specific concept. And this is to vary what it means and when it came, Analysts also have different views and interpretation of the theory of the value of money, as the quantitative factor is one of the most important factors used in the interpretation of inflationary phenomena. We will therefore be exposed to the most important definitions of inflation, methods of measurement and the most important theories interpreted.

## 1. Definition of inflation

What is Inflation if we go back to economic history is that the origin of the word Which means exaggeration. However, economic reality has shown that the definition of inflation is governed by disciplines and foundations where the concepts of inflation are multiplied according to the multiplicity and diversity of these disciplines, the foundations and the multiple views of economists on these disciplines and the foundations in defining and demonstrating the meaning of inflation. (Al-Din, 2000)

First definition:

"Each increase in the amount of cash leads to an increase in the overall level of prices" in the sense that the more we add in the market, the higher the price, the higher the inflation phenomenon, assuming other things stays the same. However, it facilitates superficial observation and the generality of this definition is lacking in accuracy and clarity and the sincerity of its own evidence (Qatif, 2006).

Second definition:

Some economists, based on the theory of income and expenditure, define inflation as follows: "" is the increase in the rate of expenditure and income ". Increasing cash expenditure and hence cash income causes prices to rise and inflate on the requirement that the quantity of existing goods remain stable (Rashad al-Assar, 2009).

However, this definition suggests that cash incomes may increase without the increase being attributed to monetary factors such as higher workers' wages or to the increase in the rate of cash expenditure. Moreover, in the event of a transition from recession to prosperity, the growth of cash income cannot be described as inflationary (Abdelkader, 2009).

## 2. Methods of measuring inflation

As already experienced in publicizing the phenomenon of inflation, the general manifestation of this phenomenon is the continuous rise in prices. Thus, this phenomenon can be extrapolated from tracking the evolution of price indices. The continuous rise in price indices is a general indication of the existence of this phenomenon, but it is not a reason for its existence and is the result of inflationary forces resulting from imbalances in the national economy. It is therefore worth initially identifying the indices as a tool for measuring change in the value of money, and secondly to identify inflationary gaps aimed at measuring overall price pressure (Mohammed, 1988).

### A. Price Index Numbers

Price indices are defined as relative and time averages of prices and are prepared for different types of commodities or their sum, expressed in monetary units to measure the purchasing unit of individuals, projects and various sectors, and from this definition we derive the following (Al-Rifai, 2009):

- **Standard numbers are relative numbers:**

Any comparison of price developments for a given year is the base year that is stable and measured by the change for the year in which it is required to know the base changes that are called the base year

As price developments lead over a period of time, the latter can be considered a fundamental variable and among the formulas used in the indices we find:

> Wholesale price index reflects individuals' standard of living.

> Retail price index is considered about consumers' purchasing power.

> Living Expenditure Index

In fact, there is an encroachment relationship between these versions of the indices. When a record moves, it moves the other numbers with it. That is, the movement of these formulas is a parallel movement especially in inflationary periods. However, economists differ in the challenge of the best type that can be used to measure the purchasing power of cash given the different level reflected in each formula, but generally the index of living expenditures is the most important measure in inflationary periods (Yassin, 2009).

## Lasper Formula:-

The weight in this formula is the quantities in the year of the foundations and the mathematical formula is:

$$h = \frac{\sum_{i=1}^{n} p_1 Q_0}{\sum_{i=1}^{n} p_0 Q_0} \times 100$$

Where

haspyres: record h

Total:

Commodity price in P1 comparison year

Commodity price in base year P0

Quantity of commodity in the base year Q0

The weight here is quantities in the comparison period estimated at base year prices i.e.:

$$p\% = \frac{\sum_{i=1}^{n} p_i Q_i}{\sum_{i=1}^{n} p_i Q_0} \times 100$$

Where

Peache: P Record

Quantity of commodity in Qi comparison year

**Fisher Formula:-**

$p = \sqrt{p \times L}$ It is the geometric average of Bash formula and Lasper where:

FICHER : F

PEACHE: P
LASPPYRES: L

## 3. Types of inflation in terms of its characteristics

Given the characteristics of inflation, we find two criteria for determining its types: the first criterion in terms of the severity of inflationary pressure. The second criterion concerns different inflationary sectors.

A. Standard of inflationary pressure intensity ((Annaba), 1992)

Inflation in terms of its severity and degree of strength can be divided into runaway inflation and medium inflation.

- **Hyperinflation**

This type of inflation is considered to be a danger to the national economy at all so that prices rise imaginatively and consistently to the extent that it has a difficult impact on monetary authorities to reduce and address as the purchasing power of money drops to the point where it loses value as an intermediary for exchange and is sad for values, prompting individuals to dispose of it. Which has happened in many countries in the wake of the two world wars as Germany? Russia and Romania, Germany's inflation is all-time high at 1,000 billion times.

Some economists believe that this type of inflation remains rare because it is linked to a range of reasons, including the emergence of what is known as social disintegration, the collapse of economic activity and the inability of governments to control the people. This type of inflation is also particularly linked to the remnants of war and the resulting external obligations that lead the authorities to reduce their currency for disposal.

- **Moderate "unbridled" inflation**

This type of inflation is characterized by higher prices, but at lower levels than those defined by unruly inflation. This means that its effects are less serious for the economy. There is no loss of confidence in the cash in circulation in general. The most important feature of this inflation is the ability of government authorities to treat and combat it and reduce its negative effects on the economy (Hathloul, 2006).

## B. Criteria for different economic sectors

The diversity of existing economic sectors has led to the diversification of inflationary sectors. Inflation in consumer industries is different from that in investment sectors. Inflation in the commodity market is different from inflation in the factor market. On this basis, Ketter distinguishes between two types of inflation:

- **Inflation in commodity markets**

According to Ketter, the prevalent types of inflation in commodity markets are commodity inflation and capital inflation.

## Commodity inflation

This inflation in the consumer industries sector occurs when the cost of producing investment goods increases savings, i.e. individuals turn to consumption at the expense of their savings. This is reflected positively on entrepreneurs in consumer goods industries.

## Capital inflation

Inflation in the investment industries sector reflects an increase in the value of investment commodities at the expense of their production, benefiting both consumption and investment sectors.

- **Inflation in factor markets**

Ketter differentiates between two types of inflationary trends rampant in factor markets and their effects on individuals' cash incomes

## Inflation for profit

Is the inflation that emerges from the penalty of increased investment on savings so that profits are achieved in the consumer commodity industries sector and the investment commodity industries sector

## Inflation

This type of inflation is the result of higher workers' wages resulting in increased production expenditures and thus higher prices of factors of production.

## 2nd. Money Supply

The volume of expenditure corresponding to the current production of goods and services is the focal point of the analysis of the monetary economy. This volume fundamentally affects economic well-being through its impact on output, employment and price levels.

This volume of expenditure, from a cash point of view, is a cash balance multiplier in the cash turnover velocity factor. Monetary policy takes its place from the cash balance without the rapid turnover of cash for two reasons: first, that the volume of cash spending is directly linked to the size of the economy's cash balance. and the second. Cash balance can be managed by monetary authorities while they cannot control the speed of cash turnover*. The cash balance thus takes its economic content and importance through its relation to expenditure size and its impact on production, employment and prices on the one hand, and as a result of its control and management on the other.

In order for monetary authorities entrusted with managing the monetary policy of the economy in question to exert their influence on the cash balance, the sources of monetary supply must be specific.

* The speed of cash turnover is not only inverted by the proportion of real resources that individuals want to keep in liquid cash. and the rapid turnover of cash depends on the progress of the financial and banking systems and payment reconciliation habits, The rapid movement of people from one place to another depends on the degree of population density and society's habits in terms of income allocation between savings and consumption. and all these aspects are out of control and change at least slowly in the short term.

## 1. What is money supply in the traditional economy:

The concept of cash supply is directed to the balance of things that are used as an intermediary in exchange. Within this general concept, the concepts of cash supply are multiplied according to each of these concepts. Along with cash in circulation and auxiliary currency, of the types of things that have a very high degree of liquidity, i.e. those that can be immediately converted into money without fluctuation in value or volatility that occurs at minimal levels. In this light, three concepts of monetary supply are distinguished:

**Narrow concept: It is commonly symbolized by the symbol M1**

Deposits calculated within this cross-cutting concept are current deposits for the private sector only to "net currency in circulation" and current deposits for the private sector (Hashim, 1969).

**And the broad concept: It is symbolized by the symbol M2**

In addition to the narrow concept components include semi-cash, which are forward deposits, short-term savings deposits of commercial banks as well as mailbox deposits,

**And the concept of local liquidity: is symbolized by the symbol M3**

In addition to the broad concept components, other highly liquid assets such as non-family deposits, bonds and government authorizations are included (Ruby, 2000).

## 2. Cash Offer Determinants:

In most countries, there are certain controls over monetary authorities' conduct in issuing cash quantities available for trading. The monetary policy in determining the amount of money being traded is subject to several considerations, including:

A. The impact of the amount of cash on the level of credit.
B. The size of the State's employment.
C. Amount of inactivated productive materials.
D. Periods of inflation and contraction are punished.

The preceding considerations are influential and effective in determining the amount of cash by the State's monetary authorities, and therefore many economists see the money supply process as a variable element that is inflexible (Yahya W. Y., 2000).

## 3. Factors influencing the determination of a cash offer:

## A. Central Bank: Affects Cash Offer Through

- Cash multiplier: It is done through the legal reserve ratio on time deposits (inverse relationship with cash offer).
- Cash base by:
  - Borrowing rule.
  - Non-borrowing rule.

## B. Commercial Banks:

- Through multiplier (m): The greater the amount of retention of surplus reserves, the greater the leakage in the multiplier, the lower the supply of cash and vice versa. The amount of retention in commercial banks is affected by several things:
- Risk associated with withdrawals.
- Its ability to borrow.
- Interest rate.
- The cost of borrowing from the central bank.
- Fear of bank failure.
- Monetary Rule (MB): Commercial banks' desire to borrow from the Central Bank or unwillingness (borrowing rule) affects the monetary base. Borrowing increases the total reserves (R) and therefore MB increases with the offer of cash and vice versa.

**C. Audience: The public influences the cash multiplier by how much they wish to retain in the form of the trading process (r) and the public's behaviour is influenced by several factors:**

- The more a person's wealth, the less students on (r) and the more on deposits.
- Return on assets.
- Desire to retain liquid assets.
- The amount of progress of bank return in the public.
- The increase in banking reduces the supply of cash.
- Illegal operations such as money laundering (Samo Bloon, 2006).

## 3th. Relationship between Iraq's cash supply and inflation (2003-2017)

Interest in studying this phenomenon began after the Second World War, where the world's economies began to coincide continuously. This prompted governments to pay attention to this phenomenon by finding efficient fiscal and monetary solutions for the purpose of overcoming or addressing inflation. "The lack of control over this phenomenon will have serious economic, social and political consequences. The Iraqi economy has experienced waves of inflation since the 1970s after oil prices erupted, with increased rates of monetary issuance increasing salaries. The decade of the Iraqi-Iranian war worsened in the 1980s and grew in the 1990s. As a result of the interaction of many and real factors over time associated with structural imbalances, these factors are added to the underdevelopment of banking habits, as well as the low flexibility of the Iraqi economy in its productive sectors and high production and import costs, which was reflected in higher inflation rates. During the 1990s, Iraq witnessed a marked rise in price levels following higher inflation rates. Inflation rose during 2005-2006 (Iraq, (2003-2017)), reaching 37-53%, respectively. The reason for this was the relationship between the value of the local currency and the exchange rate. The lower the value of the local currency, the higher the exchange rate, and consequently the higher inflation rates and the higher the government tunnels (Hindi, 2010). (% 10.0) in 2007 and (% 2.8 in 2010) This decrease in inflation rate is due to the continuous pursuit by the central bank to reduce inflation rate by following a monetary and financial policy in line with the raising of the IQD value in front of foreign currencies. (2016-2011) Compared to previous years, the general inflation rate was the lowest (1.39%) in 2015. As shown in table (1).

Table (1)
Inflation and money supply rates in Iraq's economy
During the period (2003-2012)

| **Money Supply m2** | **(%) Inflation rate** | The year |
|---|---|---|
| 2898 | 32.5 | 2003 |
| 12254 | 26.9 | 2004 |
| 14684 | 36.9 | 2005 |
| 21080 | 53.2 | 2006 |
| 26956 | 30.8 | 2008 |
| 34920 | (-)2.8 | 2009 |

| | | |
|---|---|---|
| 45438 | 2.5 | 2010 |
| 60386 | 5.6 | 2011 |
| 72178 | 6.1 | 2012 |
| 75466 | 1.9 | 2013 |
| 87679 | 2.2 | 2014 |
| 90728 | 1.4 | 2015 |
| 82595 | 4 | 2016 |
| 88082 | 2 | 2017 |

Source: Annual economic reports of the Central Bank of Iraq, different years

## 4FOMeasuring the impact of money supply on inflation (applied framework)

The standard model is one of the methods of uploading and interpreting any of the complex economic phenomena. The fundamental objective of formulating models with a range of different economic variables. The standard is to upload and test the validity of economic theory hypotheses. To interpret the relationship between inflation as the "dependent variable" and money supply as the "independent variable", the impact of changing money supply on inflation rates in Iraq's economy must be measured over the period 2003-2017.

This relationship can be expressed by the following simple regression equation:

Yi = b0 + b1Xi+ E

Where Yi is the dependent variable that represents the inflation rate

(Xi) The independent variable that represents the widespread offer of cash

bo, b1) regression equation transactions.

E Random Error

After uploading the data in table 2 showing the following results: -

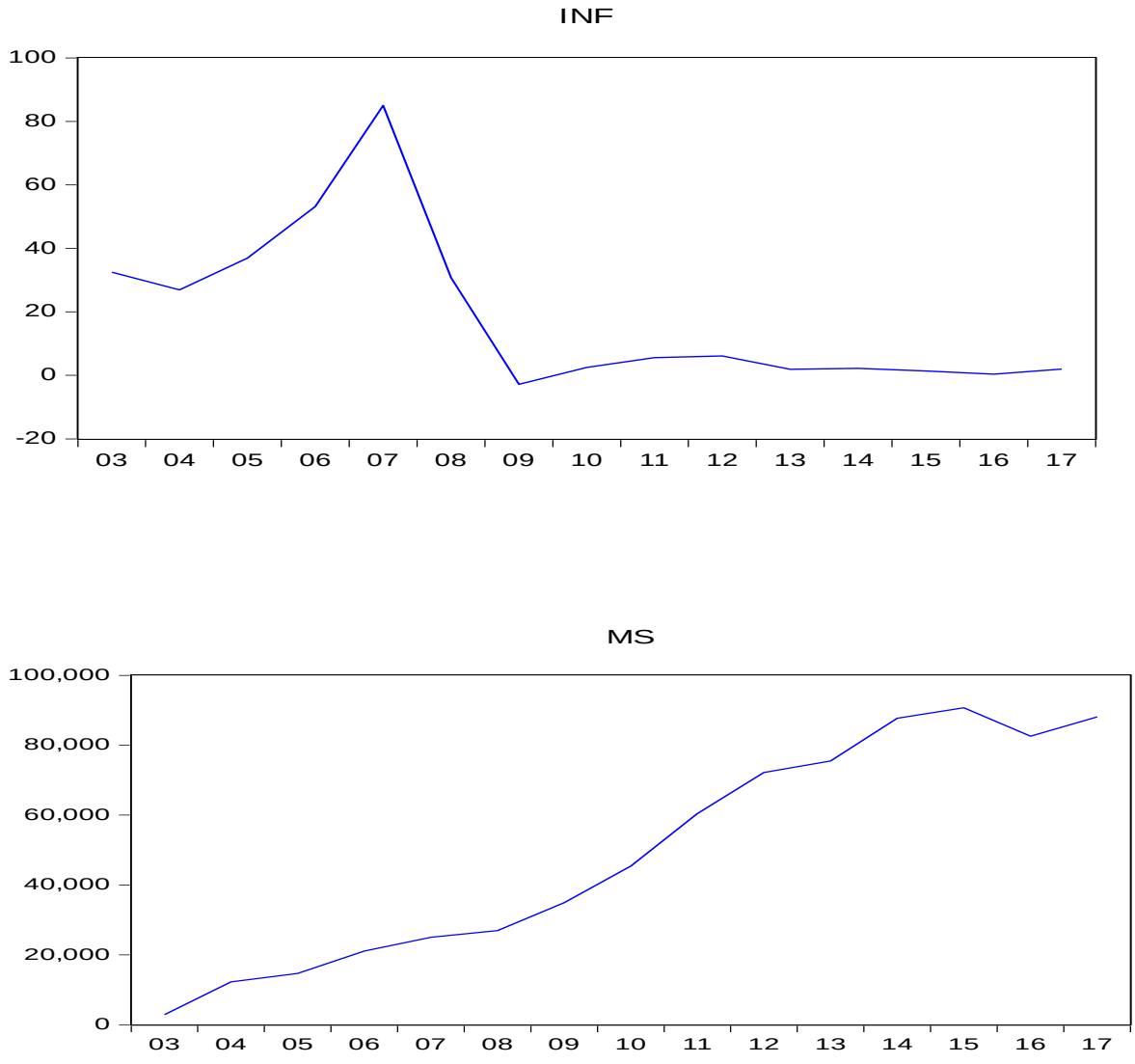
Table 2

Money supply (m2) and inflation in Iraq's economy (2003-2017)

| MS | INF | year |
|---|---|---|
| 2,898 | 32.5 | 2003 |
| 12,254 | 26.9 | 2004 |
| 14,684 | 36.9 | 2005 |
| 21,080 | 53.2 | 2006 |
| 25,014 | 85.0 | 2007 |
| 26,956 | 30.8 | 2008 |
| 34,920 | 2.8- | 2009 |
| 45,438 | 2.5 | 2010 |
| 60,386 | 5.6 | 2011 |
| 72,178 | 6.1 | 2012 |
| 75,466 | 1.9 | 2013 |
| 87,679 | 2.2 | 2014 |
| 90,728 | 1.4 | 2015 |
| 82,595 | 0.4 | 2016 |
| 88,082 | 2.0 | 2017 |

| | | |
|---|---|---|
| 95390 | 4 | 2018 |

1. **Chart: The diagram of the study variables showing MS inflation INF cash is shown to have a time trend of variables and therefore are unstable**




2. **Stabilization Test (Dickie Fuller): To ensure the stability of the variables being studied and for the sake of not getting a false regression, we did Stabilization Test Dickie Fuller on the study variables and it turned out that the two variables are stable at the first difference where the probability value (P- value) for each is less than 5%.**

Null Hypothesis: D(INF) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

| | | t-Statistic | Prob.* |
|---|---|---|---|
| Augmented Dickey-Fuller test statistic | | -3.196022 | 0.0460 |
| Test critical values: | 1% level | -4.121990 | |
| | 5% level | -3.144920 | |
| | 10% level | -2.713751 | |

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 12

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(INF,2)
Method: Least Squares
Date: 12/22/18 Time: 17:36
Sample (adjusted): 2006 2017
Included observations: 12 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(INF(-1)) | -1.282261 | 0.401205 | -3.196022 | 0.0109 |
| D(INF(-1),2) | 0.418755 | 0.297309 | 1.408482 | 0.1926 |
| C | -3.692415 | 6.384186 | -0.578369 | 0.5772 |

| | | | |
|---|---|---|---|
| R-squared | 0.555230 | Mean dependent var | -0.700000 |
| Adjusted R-squared | 0.456393 | S.D. dependent var | 29.64952 |
| S.E. of regression | 21.86051 | Akaike info criterion | 9.219558 |
| Sum squared resid | 4300.936 | Schwarz criterion | 9.340785 |
| Log likelihood | -52.31735 | Hannan-Quinn criter. | 9.174676 |
| F-statistic | 5.617600 | Durbin-Watson stat | 2.214898 |
| Prob(F-statistic) | 0.026098 | | |

Null Hypothesis: D(MS) has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

| | | t-Statistic | Prob.* |
|---|---|---|---|
| Augmented Dickey-Fuller test statistic | | -1.836437 | 0.0648 |
| Test critical values: | 1% level | -2.754993 | |
| | 5% level | -1.970978 | |
| | 10% level | -1.603693 | |

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 13

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(MS,2)
Method: Least Squares
Date: 12/22/18 Time: 17:37
Sample (adjusted): 2005 2017
Included observations: 13 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(MS(-1)) | -0.405175 | 0.220631 | -1.836437 | 0.0912 |

| | | | |
|---|---|---|---|
| R-squared | 0.218085 | Mean dependent var | -297.6154 |
| Adjusted R-squared | 0.218085 | S.D. dependent var | 7590.802 |
| S.E. of regression | 6712.239 | Akaike info criterion | 20.53506 |
| Sum squared resid | 5.41E+08 | Schwarz criterion | 20.57851 |
| Log likelihood | -132.4779 | Hannan-Quinn criter. | 20.52612 |
| Durbin-Watson stat | 1.991287 | | |

3. **Estimate Model: The estimate results showed a reverse correlation between inflation and cash supply in Iraq, but they are very weak. An increase of one unit of cash supply leads to a reduction in inflation by 0.0005. The cash offer explains 45% of changes in inflation according to the R-squared value. The output is moral in impact. The probability value p-value was less than 5%.**

Dependent Variable: INF
Method: Least Squares
Date: 12/22/18 Time: 17:39
Sample: 2003 2017
Included observations: 15

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| MS | -0.000540 | 0.000162 | -3.327360 | 0.0055 |
| C | 45.61138 | 9.411193 | 4.846503 | 0.0003 |

| | | | |
|---|---|---|---|
| R-squared | 0.459938 | Mean dependent var | 18.97529 |
| Adjusted R-squared | 0.418395 | S.D. dependent var | 25.13080 |
| S.E. of regression | 19.16551 | Akaike info criterion | 8.867667 |
| Sum squared resid | 4775.116 | Schwarz criterion | 8.962074 |
| Log likelihood | -64.50750 | Hannan-Quinn criter. | 8.866661 |
| F-statistic | 11.07133 | Durbin-Watson stat | 1.204047 |
| Prob(F-statistic) | 0.005453 | | |

4. **Self-correlation problem: Self-correlation results show no problem as estimated values fall within the limits of trust.**

Date: 12/22/18 Time: 17:40
Sample: 2003 2017
Included observations: 15

| Autocorrelation | Partial Correlation | | AC | PAC | Q-Stat | Prob |
|---|---|---|---|---|---|---|
| | | 1 | 0.382 | 0.382 | 2.6635 | 0.103 |
| | | 2 | -0.330 | -0.557 | 4.7948 | 0.091 |
| | | 3 | -0.491 | -0.138 | 9.9112 | 0.019 |
| | | 4 | -0.285 | -0.233 | 11.794 | 0.019 |
| | | 5 | 0.001 | -0.119 | 11.794 | 0.038 |
| | | 6 | 0.051 | -0.319 | 11.869 | 0.065 |
| | | 7 | 0.084 | -0.034 | 12.094 | 0.098 |
| | | 8 | 0.064 | -0.262 | 12.242 | 0.141 |
| | | 9 | 0.020 | -0.119 | 12.259 | 0.199 |
| | | 10 | 0.037 | -0.125 | 12.330 | 0.264 |
| | | 11 | -0.006 | -0.180 | 12.332 | 0.339 |
| | | 12 | -0.011 | -0.106 | 12.342 | 0.419 |

5. **Variability problem: The variation test results showed that the estimated protection value of obs R-squared is greater than 5% and therefore the model does not suffer from the problem of variability**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| | | | |
|---|---|---|---|
| F-statistic | 1.429436 | Prob. F(1,13) | 0.2532 |
| Obs*R-squared | 1.485958 | Prob. Chi-Square(1) | 0.2228 |
| Scaled explained SS | 2.701967 | Prob. Chi-Square(1) | 0.1002 |

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 12/22/18 Time: 17:41
Sample: 2003 2017
Included observations: 15

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 674.9942 | 350.7015 | 1.924697 | 0.0764 |
| MS | -0.007226 | 0.006044 | -1.195590 | 0.2532 |

| | | | |
|---|---|---|---|
| R-squared | 0.099064 | Mean dependent var | 318.3411 |
| Adjusted R-squared | 0.029761 | S.D. dependent var | 725.0599 |
| S.E. of regression | 714.1891 | Akaike info criterion | 16.10374 |
| Sum squared resid | 6630860. | Schwarz criterion | 16.19815 |
| Log likelihood | -118.7780 | Hannan-Quinn criter. | 16.10273 |
| F-statistic | 1.429436 | Durbin-Watson stat | 2.283301 |
| Prob(F-statistic) | 0.253210 | | |

**CONCLUSIONS**

1- The results showed that the morale is weak and negative, i.e. the inverse relationship between inflation (dependent variable) and money (autonomous variable "). This is a contradiction of the operative theory of economic theory, which provides for a foreign relationship. This can be explained by the fact that the Iraqi economy is an unstable economy. Consequently, there are other factors affecting inflation, including the low level of productive activities. This is reflected in a reliance on foreign imports from the so-called imported inflation. .
2- Inflation is one of the most serious economic problems affecting various countries, including Iraq, which has social, political and security implications, in particular Iraq's stagnant inflation, which brings together inflation and unemployment.
3- The Central Bank of Iraq (CBI) was able to reduce inflation rates after 2003 as foreign exchange yields from higher crude oil prices increased.

## Recommendations

1- Improve the level of productive activities in the Iraqi economy during the short-term and long-term economic policies, improve the reality of domestic industry and reduce the dependence on imports and their effects on the supply of cash.

**2-** Activating the role of monetary policy in economic life, especially through the independence of the Central Bank of Iraq, as a fundamental need to address economic problems, including inflation.

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